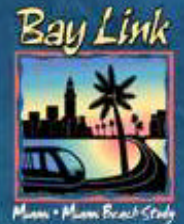


Miami-Miami Beach Transportation Corridor Study



BAY LINK **Presentation to the** **Miami-Dade** **Metropolitan Planning Organization**

July 29, 2004



Today's Purpose



- Review Bay Link Project and Purpose
- Review the Project Development Process
- Present the Refined LPA
- Review Next Steps

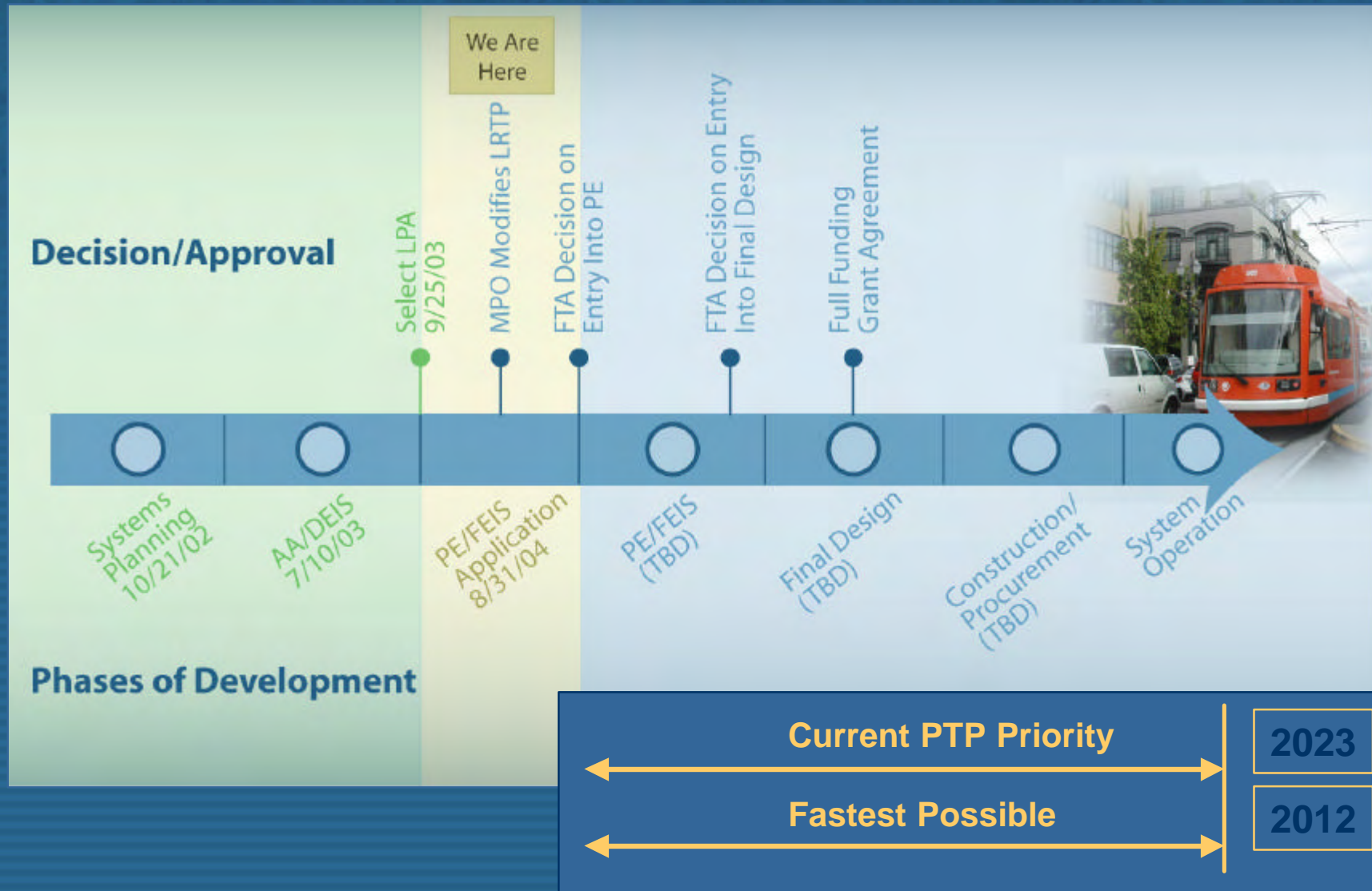
What Is Bay Link?



Streetcar Line Providing a Regional Transit Connection Between Miami and Miami Beach:

- **Maximize tremendous transit investment to date with reliable high capacity regional connection.**
- **Provide support for current and future development and connect major public/private investment in region's economic core.**
- **Provide circulation in core areas.**
- **Serve as connection for future extensions.**

Federal Transit Administration: Program Development Process



Phase 2 Products



Refine LPA Definition (Complete 7/30/04)

- Physical Alignment/Station Locations
- Operating Plan
- Ridership Projections
- Capital and Operations and Maintenance Cost
- Traffic Analysis

PE/FEIS Request (Submit 8/12/04)

- PE/FEIS Request Letter
- New Starts Report
- Project Management Plan
- PE/FEIS Scope of Work

Extensive Public Involvement (Continuous Over Phase 2)

Phase 2 Outreach Summary



- 4 “Form & Fit” Meetings
- 18 Station Area Planning Meetings
- Presentation to DDA
- 2 Bay Link Advisory Committee Meetings
- Presentation to City of Miami Commission
- Presentation to City of Miami Beach Commission
- 12 “Focus Group” Presentations
- Presentations to MPO Board and Subcommittees



Refined Locally Preferred Alternative



Miami Streetcar and Bay Link Compatibility



- **Bay Link & Street Car project carefully coordinated**
 - Using same street car technology
 - Share the same alignment and station locations in downtown core area of overlap
 - Same traction power system for both
- **General Phasing**
 - Street car project will probably be built first (also Phase 1 of Bay Link)
 - Balance of Bay Link (Phase 2) built according to MPO's Metropolitan Plan
 - Future streetcar lines could be accommodated on core system

Vehicle Type - Streetcar

Bay Link



Miami • Miami Beach Study



Portland

Vehicle Type - Streetcar



Tacoma

Bay Link Streetcar



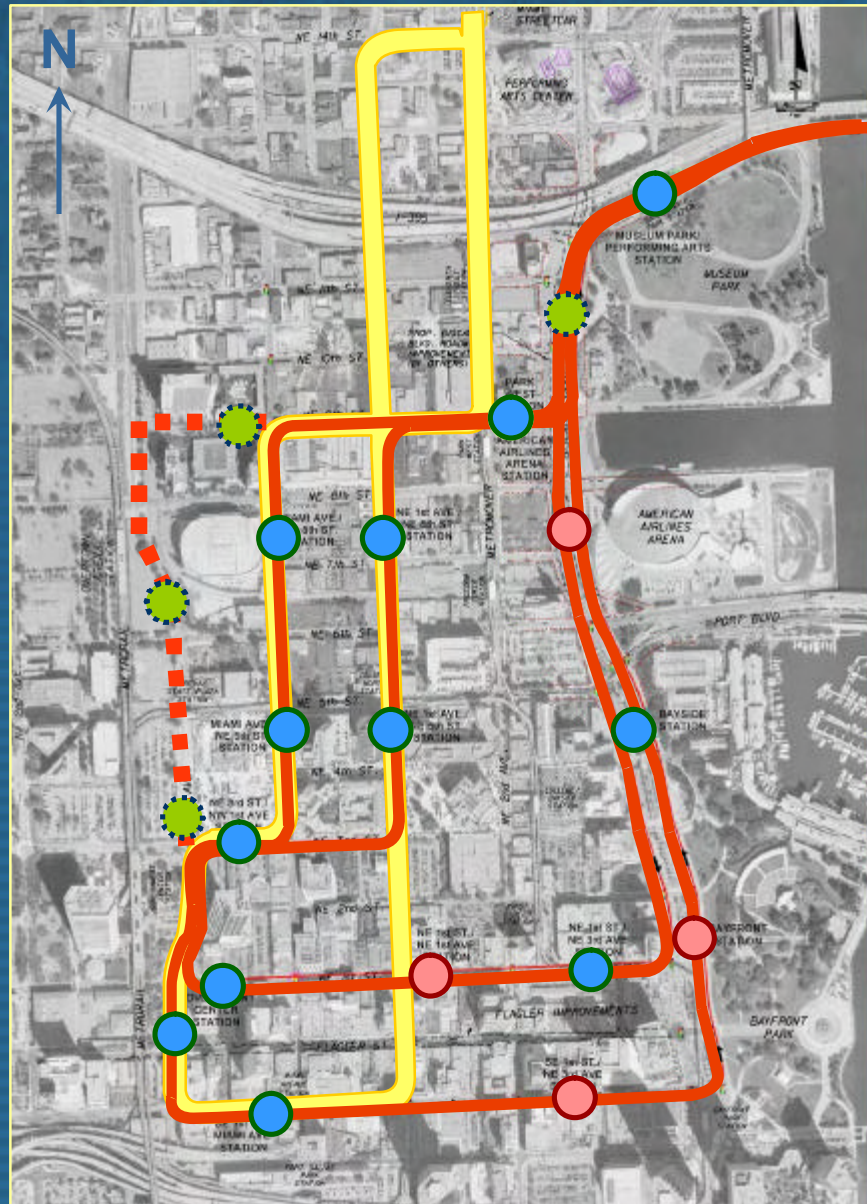
Streetcar Vehicle Characteristics








CHARACTERISTICS	SKODA INEKON
Height (Without Pantograph)	11' - 4"
Length	67' – 102'
Width	8' - 1"
Cost Per Car	\$2.0M
Floor Height	14"
Weight (AWO)	27 tons
# of Articulations	2
Low Floor	40%
Operating/Max Speed	31 MPH / 45 MPH
Passenger Capacity	41 Seated; 154 total



Miami Alignment & Station Locations



Legend:

-  Bay Link Alignment
-  Miami Streetcar Alignment
-  Regional Station
-  Transfer Stations
-  Potential Stations

Macarthur Causeway Segment



Legend



Regional Station



Transfer Station



Regional Connector

City of Miami Beach



Stations

Stations

Track/Loop


Outbound Track/Loop

Miami Streetcar

Miami Beach Alignment & Station Locations



Legend:

-  Regional Connector
-  Local Circulator
-  Regional Station
-  Circulator Station
-  Transfer Station

Operating Plan



General Parameters

- Operate from 5:30 AM until 2:00 AM
- 20.5 hours service daily
- Operates on 5-minute headways during peaks
- Revenue Vehicles
 - 11 to operate Regional Service
 - 7 to operate Circulator Service

Selected Run Times

- Government Ctr. to Convention Ctr. > 27 min
- Government Ctr. to 5th St/Alton Rd. > 12 min
- Washington Ave/Lincoln Rd. to South Pointe > 7 min
- Alton Rd/16th St to AA Arena > 16 min

Bay Link

Miami • Miami Beach Study



Possible Future Extensions



Miami Beach Operations



Possible Future Extension

Legend:

- Regional Connector
- Local Circulator
- Regional Station
- Circulator Station
- Transfer Station

5 Min. Headways During Peak

26 Stations

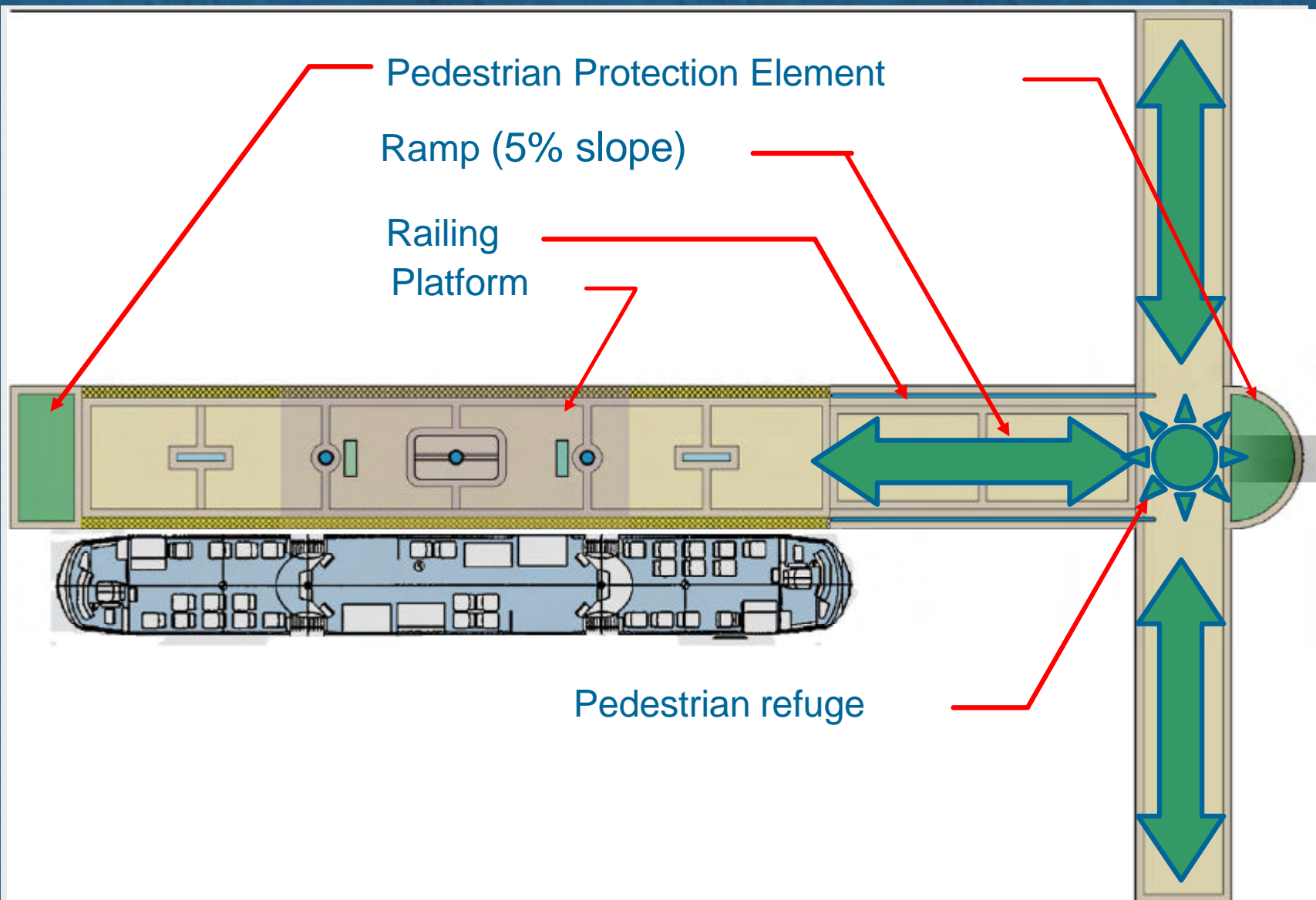
To Watson
Island/
Downtown
Miami

Train Arriving Station



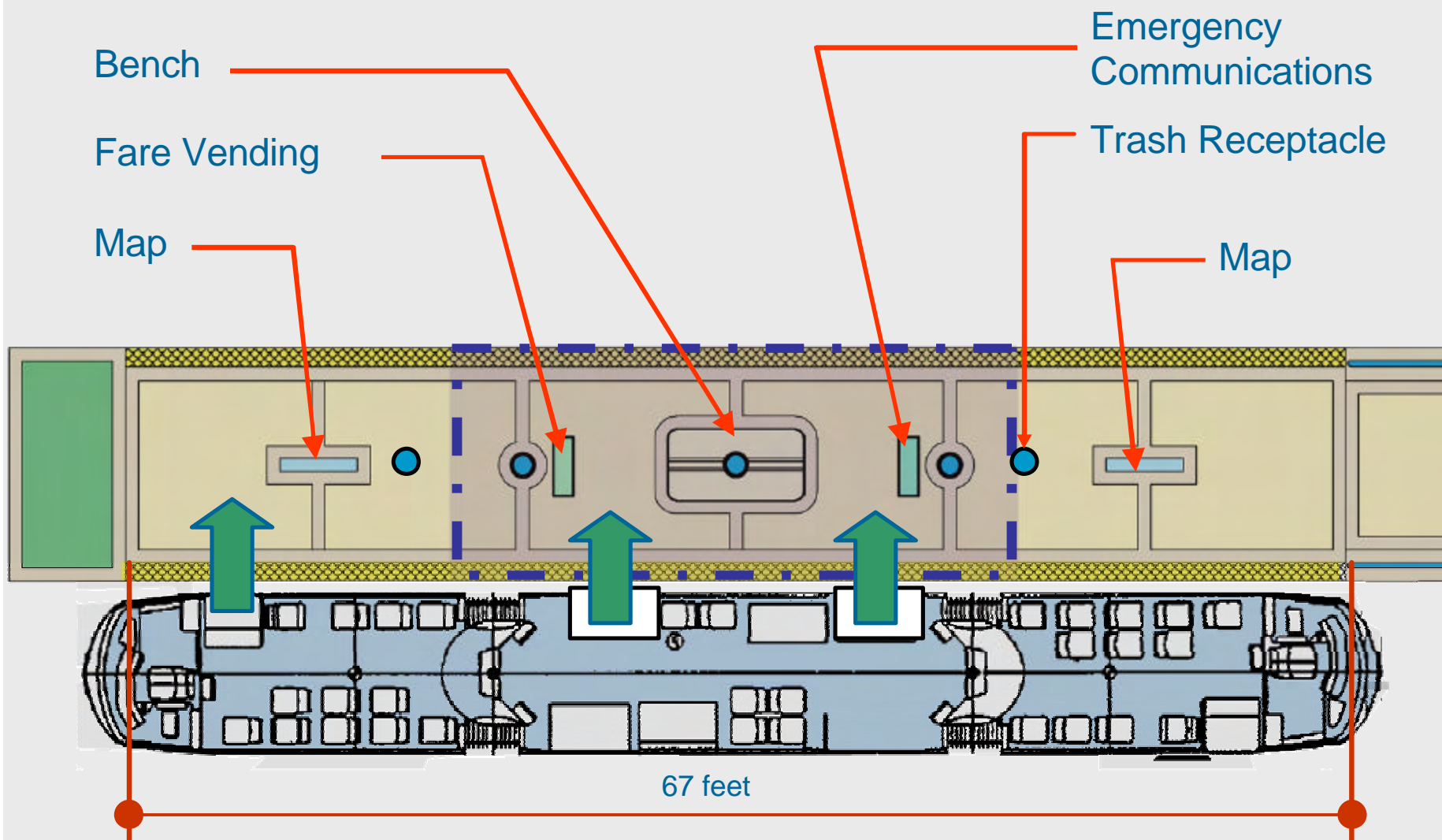
Design Parameters

Pedestrian Access



Design Parameters

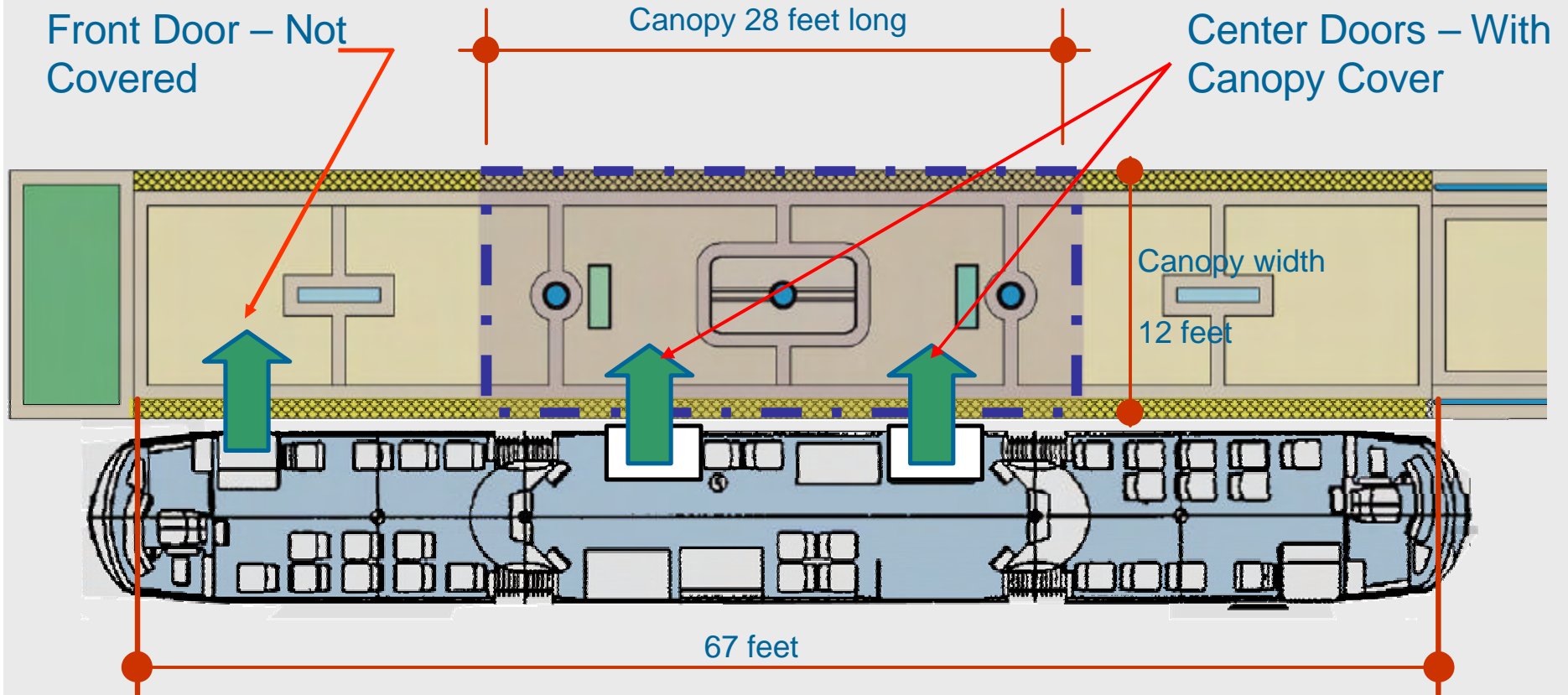
Station Elements



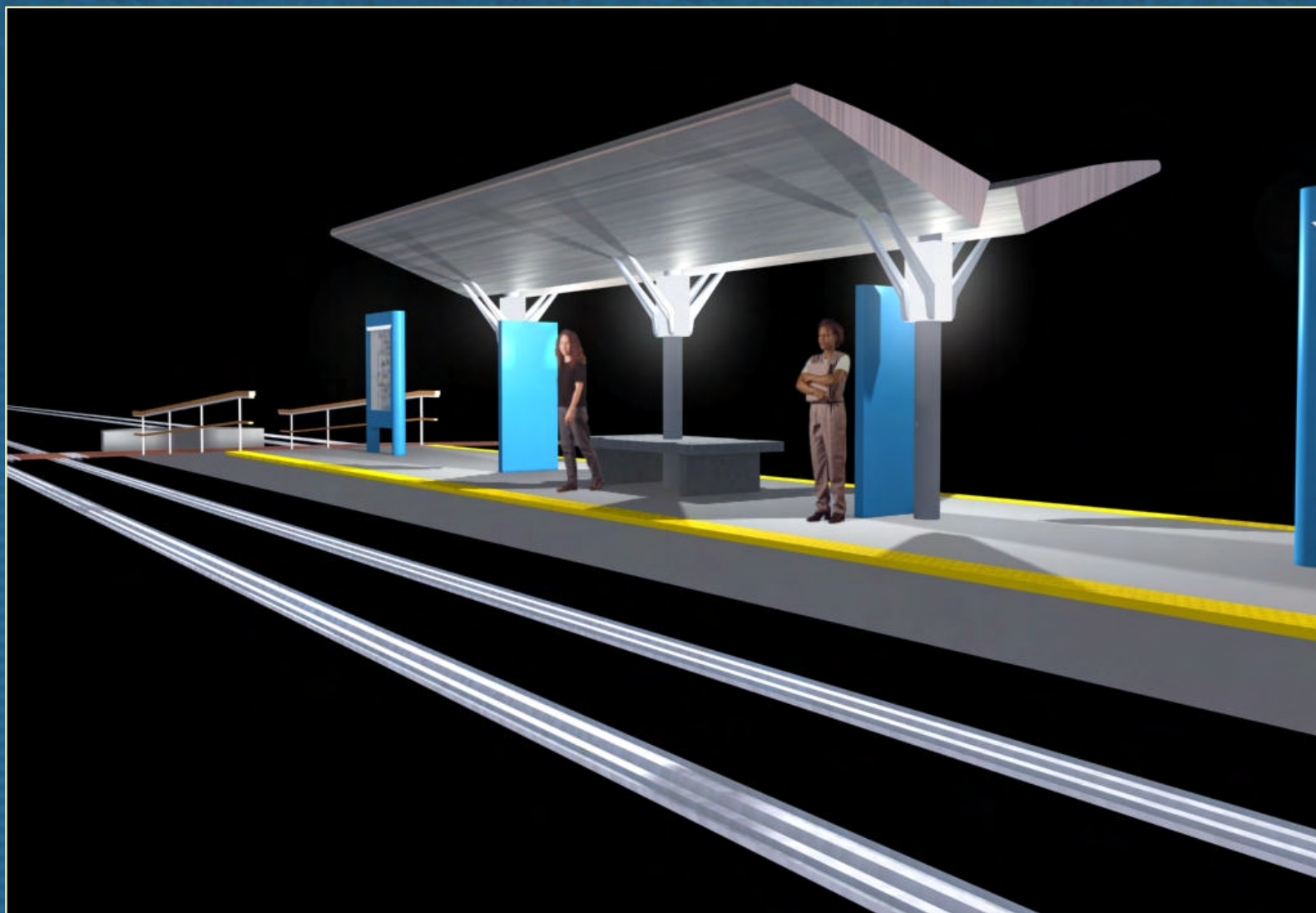
Build for single car; design for 2 cars

Design Parameters

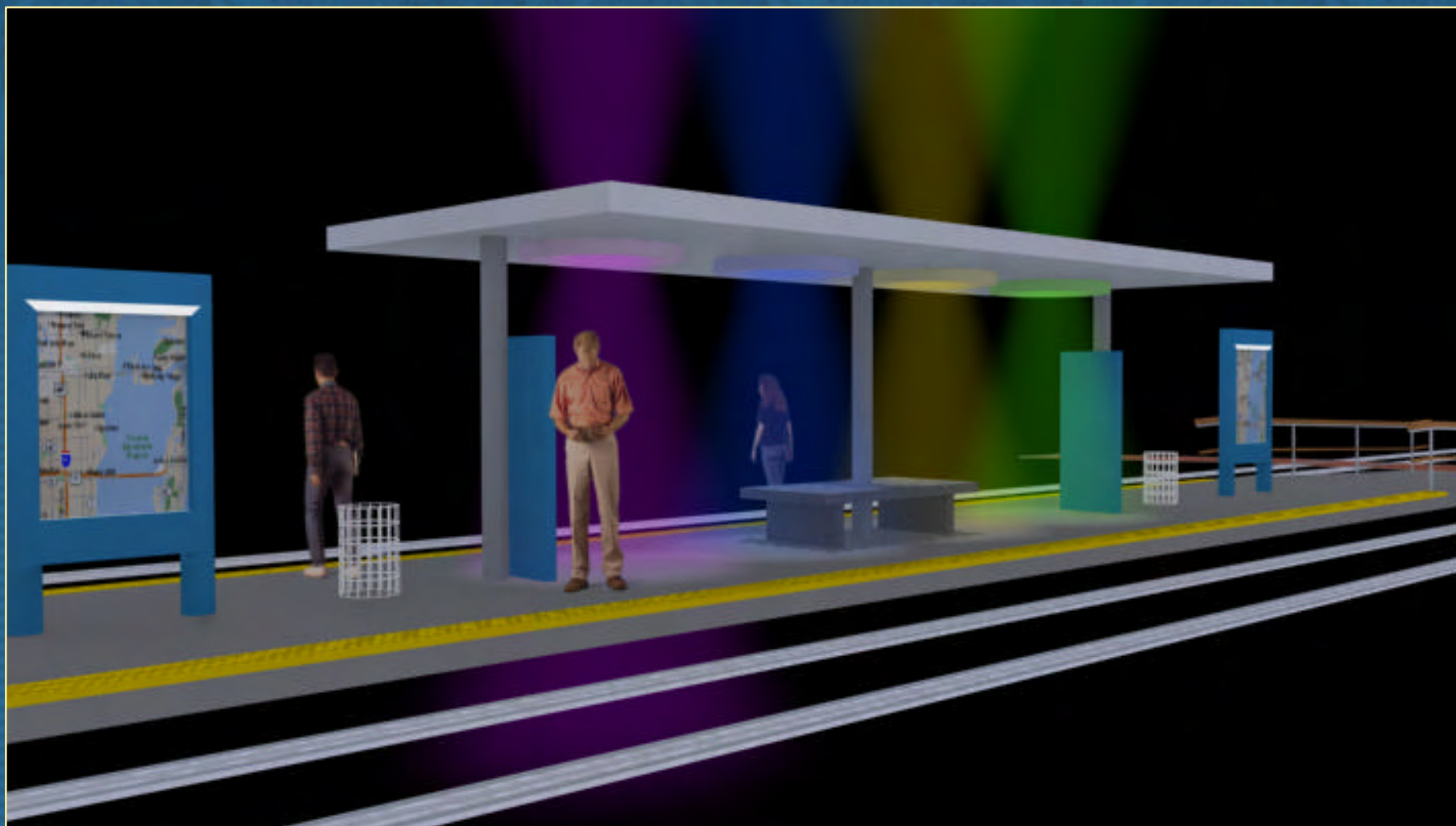
Platform Canopy



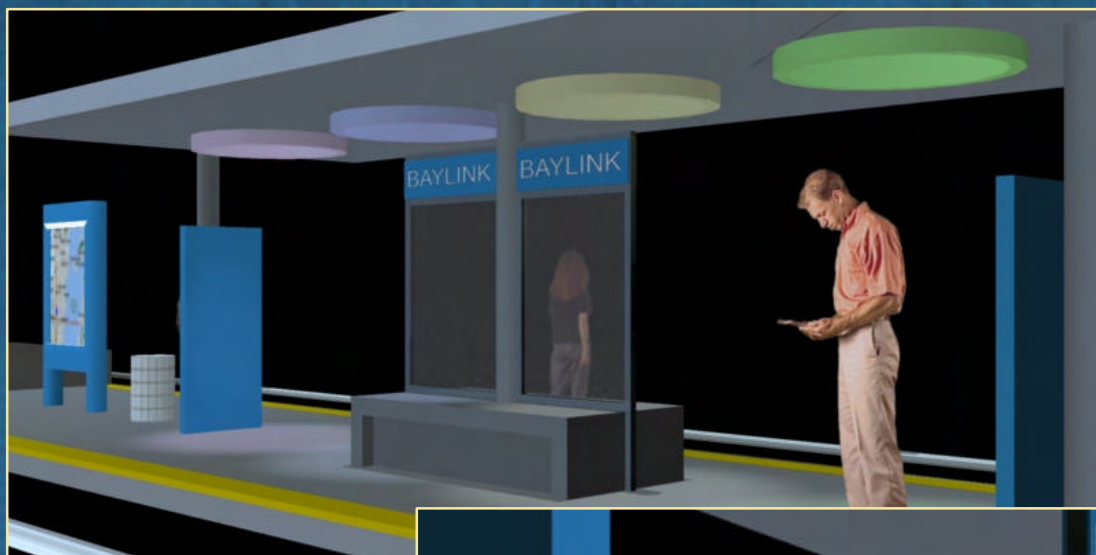
Design Option 1



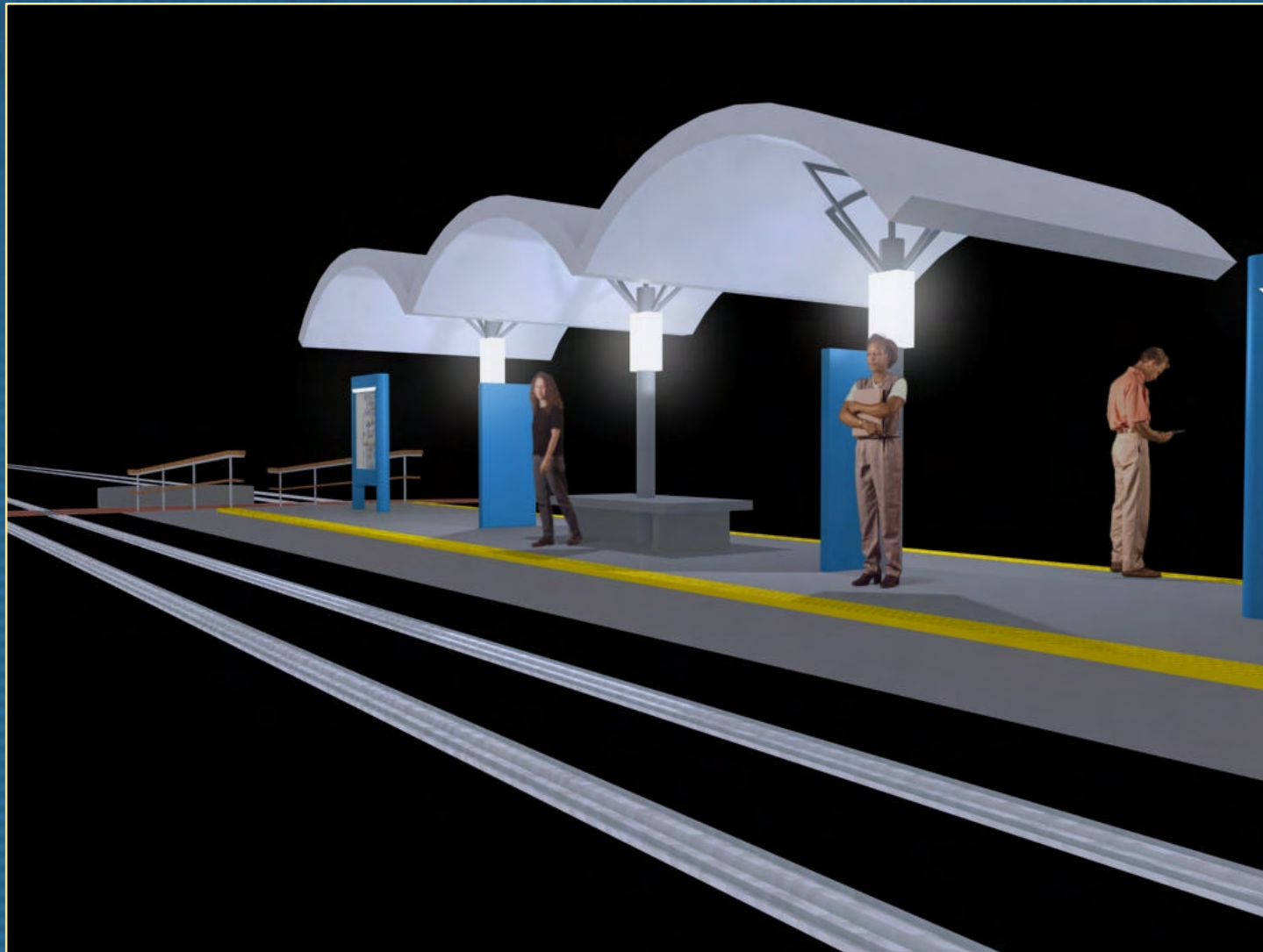
Design Option 2



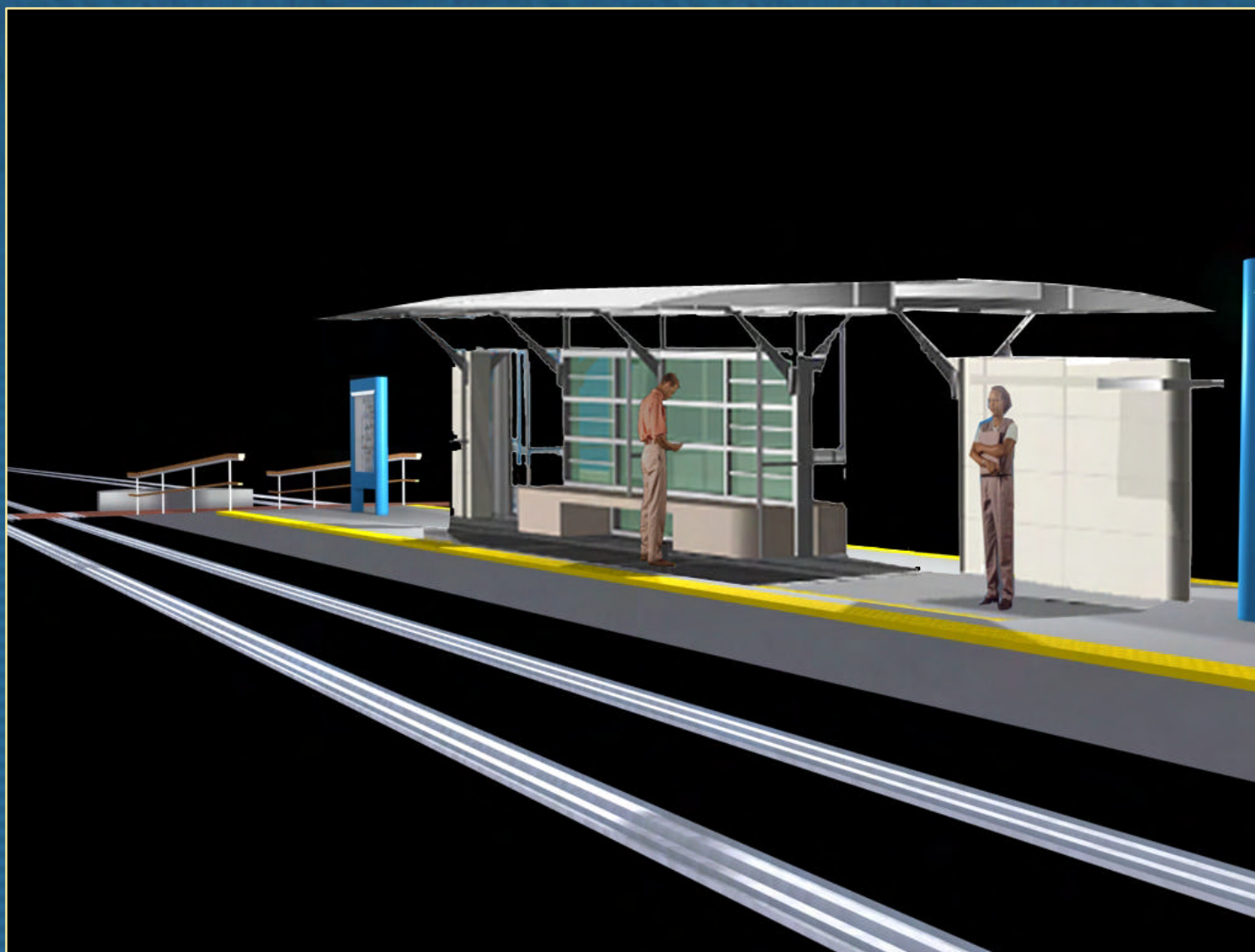
Design Option 2



Design Option 3



Design Option 4



Design Option 4



Miami Station Prototype



Government Center Station

Miami Station Prototype



Government Center Station Single Platform

Miami Station Prototype



Government Center Station Double Platform

City of Miami



Stations

Stations

Track/Loop

and Track/Loop

Miami Streetcar

Bayfront Station



Bayfront Station

Bay Link



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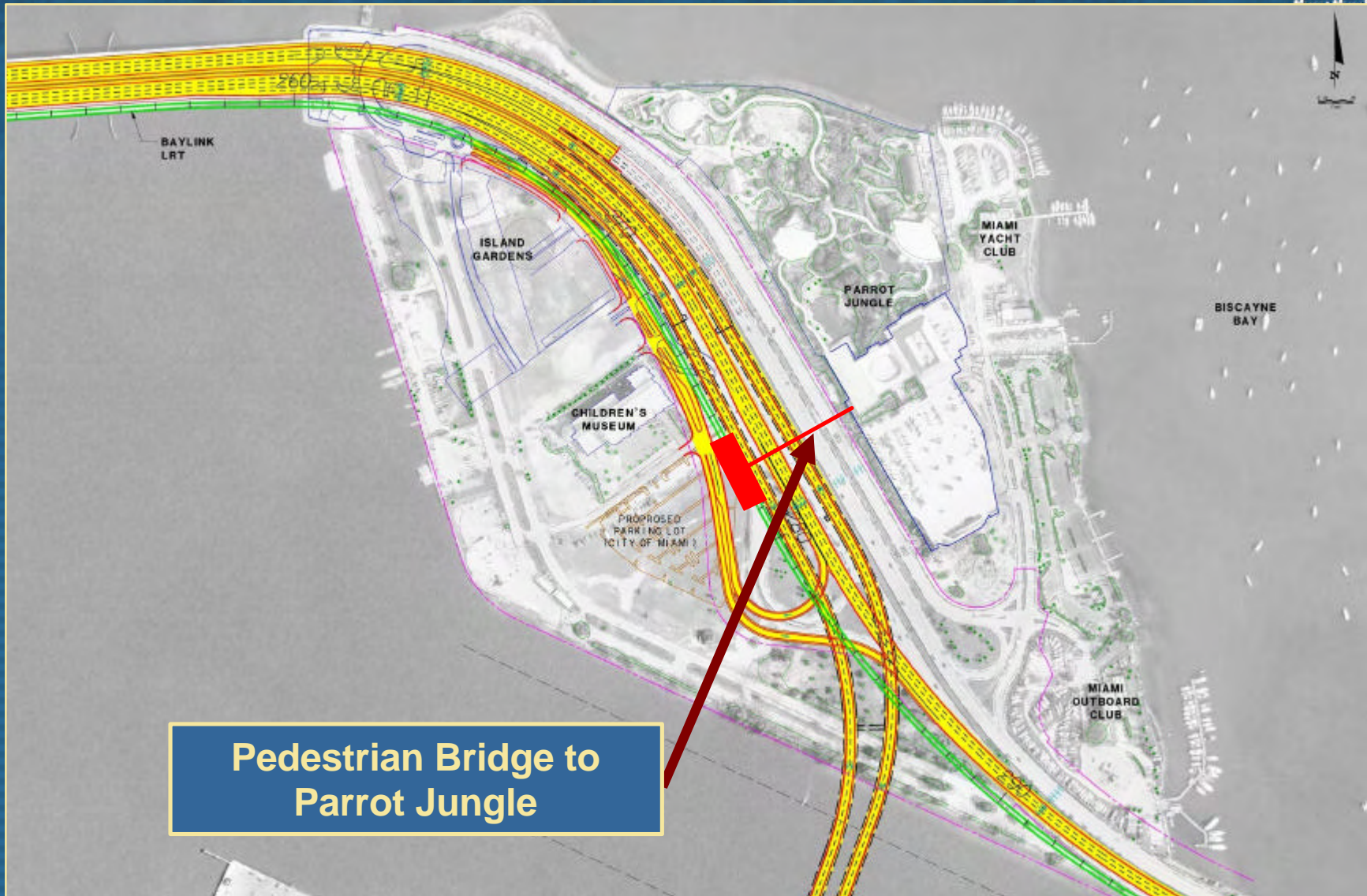


Watson Island Station

Bay Link



Bay Link Beach Study



**Pedestrian Bridge to
Parrot Jungle**

Elevated Station Prototype



Watson Island Station

Miami Beach Station Prototype



Alton Rd. & 2nd Street Station

Miami Beach Station Prototype



Alton Rd. & 2nd Street Station

Washington Ave. & Lincoln Rd. Station



Alton Rd. & 16th Street Station



Capital Cost Summary



In Millions of 2004 Dollars

	Refined LPA	DEIS LPA
1.0 Guideway	\$135.52	\$121.30
2.0 Yard & Shop	\$26.57	\$22.10
3.0 System Elements	\$70.22	\$50.80
4.0 Passenger Stations	\$35.97	\$34.40
5.0 Special Conditions	\$42.43	\$43.90
6.0 Vehicles	\$43.22	\$37.00
7.0 Right-of-Way	\$10.63	\$5.70
8.0 Soft Costs	\$123.17	\$114.50
Total Cost	\$487.73	\$429.70
Increase	+\$58.03	

Statistical Comparison



CATEGORY	DEIS LPA	REFINED LPA
Route Length (Miles)	10.4	18.04
No. of Stations	25	42
No. of Vehicles	16 LRVs	21 Streetcars
Daily Ridership Annual Ridership	15,483 4.8 M	19,677 (1) 6.1 M
Annual O&M Cost (Millions 2004 \$)	\$10.5	\$12.1 (1)
Capital Cost (Millions 2004 \$)	\$429.7	\$ 487.7

(1) Subject to review of draft estimates.

Statistical Differences



CATEGORY	DEIS LPA	REFINED LPA	DIFFERENCES
Annual Ridership (Millions)	4.8	6.1	1.3 (27.1%)
Annual O&M Costs (Millions 2004 \$)	\$10.5	\$12.1	\$1.6 (15.2%)
Capital Cost (Millions 2004 \$)	\$429.7	\$ 487.7	\$58.03 (13.5%)

Financial Plan



- Bay Link is part of People's Transportation Plan (PTP)/Included in LRTP.
- Pro-Forma Assumptions

Capital Cost	O&M Costs
50% Federal (5309)	35% Fare Box
25% State (FDOT)	65% PTP
25% Local (PTP)	

- Carefully Coordinated with Miami Streetcar Project
 - Potential for sharing cost
 - Preserving Federal Options
 - Take Advantage of creative alternatives

Next Steps



- **Submit PE/FEIS Request to FTA
(8/12/04)**
- **FTA Ranks Project, Authorizes PE/FEIS
(9/30/04)**
- **MPO Reassesses Bay Link's Regional Priority
(11/19/04)**
- **MDT Selects Consultant / Starts PE/FEIS
(1/14/05)**

Thank You



Questions & Concerns
